#### 3-phase high current filter



#### See below:

## **Approvals and Compliances**

#### **Description**

- High-power 3 phase filter for rated currents up to 2500 A
- 3-stage
- Very high attenuation
- 520 VAC and 760 VAC versions

### **Unique Selling Proposition**

- Compact filter for high power
- Three stage filter for highest attenuation
- High voltage versions
- Wide temperature range

#### **Applications**

- High voltage rating 760 VAC for IT mains supply
- Especially designed for high power applications such as: Frequency Converters, UPS-Systems, Inverters for Photovoltaic Systems and Wind Energy
- Suitable for use in equipment according to IEC/UL 62368-1

### Weblinks

pdf data sheet, html datasheet, General Product Information, Approvals, Distributor-Stock-Check, Detailed request for product, Microsite

#### **Technical Data**

Rated Current	150 - 2500 A @ Ta 50°C
Rated voltage	520/760 VAC, 50/60 Hz
Approval for	150 - 2500 A @ Ta 50 °C / 520/760/520/760 VAC; 50/60 Hz
Overload Current	1.5 x lr for 1 minute, per hour
Leakage Current	< 15 mA (440 V / 50 Hz)
Dielectric Strength	520 VAC: 2.15 kVDC between L-L 2.7 kVDC between L-PE Test voltage 2 sec 760 VAC: 3 kVDC between L-L 3.1 kVDC between L-PE
Number of Filter Stages	3-stage
Weight	9 - 67 kg
Material: Housing	Metal / Aluminium
Sealing Compound	UL 94V-0

Mounting	Screw-on mounting on chassis, from
	top
Terminal	Bolt and nut M10 for types up to 250
	A and copper bars for types upwards
	of 320 A
Operating Temperature	-40 °C to 100 °C
Climatic Category	40/100/21 acc. to IEC 60068-1
Degree of Protection	IP20 acc. to IEC 60529
Protection Class	Suitable for appliances with protection
	class I acc. to IEC 61140
MTBF	> 200'000h acc. to MIL-HB-217 F

#### **Approvals and Compliances**

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about Approvals

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

#### **Approvals**

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products. Approval Reference Type: FMCC SOL

Approval Logo	Certificates	Certification Body	Description
<b>. 511</b> ° us	UL Approvals	UL	UR File Number: E72928

# **Product standards**

Product standards that are referenced

Organization	Design	Standard	Description
<u>IEC</u>	Designed according to	IEC 60939	Passive filters for suppressing electromagnetic interference
(h)	Designed according to	UL 1283	Passive filters for suppressing electromagnetic interference

## **Application standards**

Application standards where the product can be used

Organization	Design	Standard	Description
<u>IEC</u>	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

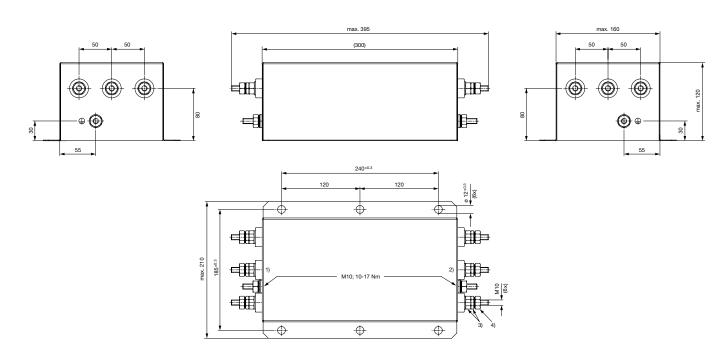
#### **Compliances**

The product complies with following Guide Lines

Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UK CA	UKCA declaration of conformity	SCHURTER AG	The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.
RoHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
<b>©</b>	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
REACH	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

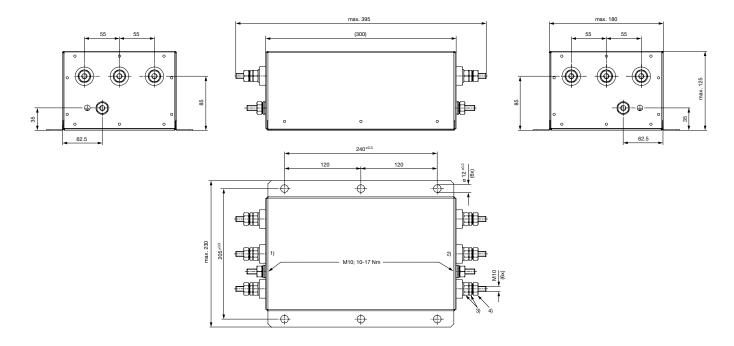
## Dimension [mm]

Case 3A



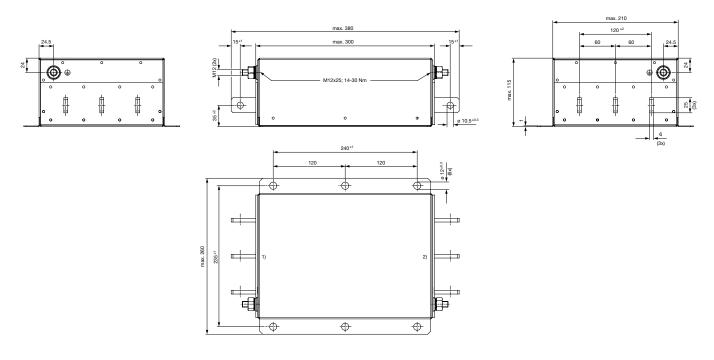
- 1) Line
- 2) Load
- 3) Lock-nut do not unscrew
- 4) Nut torque 10...17 Nm, keep lock-nut fastened

Case 3B



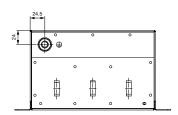
- 1) Line
- 2) Load
- 3) Lock-nut do not unscrew
- 4) Nut torque 10...17 Nm, keep lock-nut fastened

Case 3C

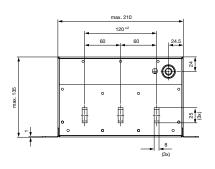


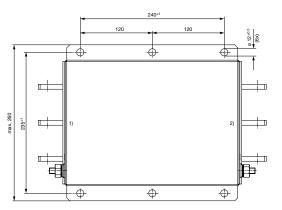
- 1) Line
- 2) Load

Case 3D



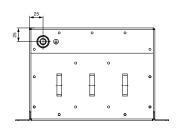


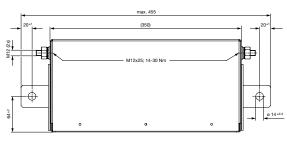


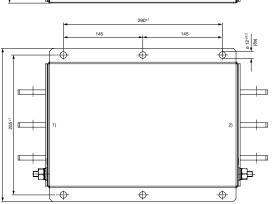


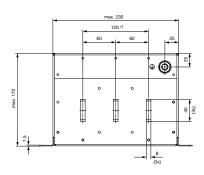
1) Line 2) Load

Case 3E





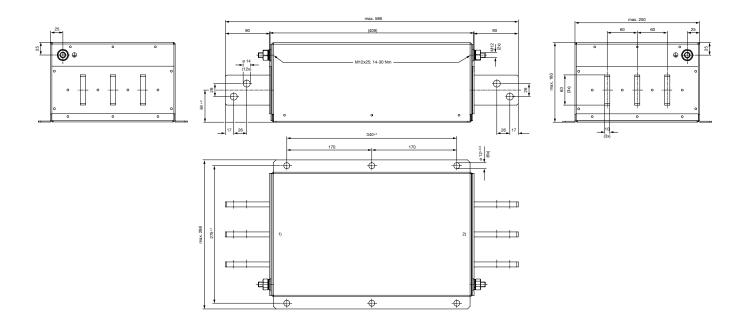




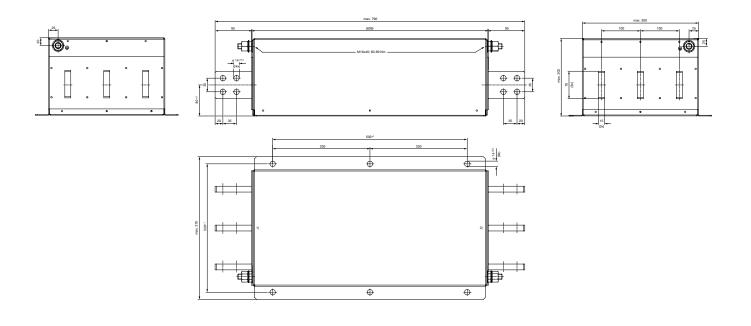
1) Line

2) Load

Case 3F

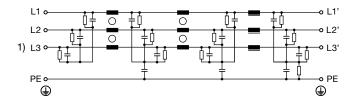


1) Line 2) Load Case 3G



1) Line 2) Load

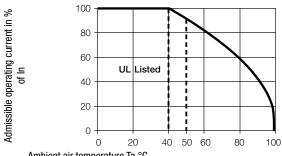
# **Diagrams**



1) Line

# **Derating Curves**

Permissible Working Current as a Function of Ambient Temperature



Ambient air temperature Ta °C

Standard version 180 A / 520 V 250 A / 520 V 320 A / 520 V 150 A / 520 V 400 A / 520 V 600 A / 520 V 800 A / 520 V 1000 A / 520 V 1600 A / 520 V 2500 A / 520 V 150 A / 760 V 180 A / 760 V 250 A / 760 V 320 A / 760 V 400 A / 760 V 600 A / 760 V 800 A / 760 V 1000 A / 760 V 1600 A / 760 V 2500 A / 760 V

### **Variants**

Rated Current @ Ta 50°C (40°C) [A]	Rated Voltage [VAC]	Power (kW)	Leakage Cur- rent [mA] @ 440V, 60Hz 1)	Power Dissipation [W]	Weight [kg]	Housing	Order Number
150 (164)	520	75	14.1	8	9 kg	3A	FMCC-H93A-J532
180 (197)	520	90	14.1	11	9 kg	3A	FMCC-H93A-J832
250 (250)	520	132	14.1	13	11 kg	3B	FMCC-H93B-K532
320 (350)	520	160	14.1	16	12 kg	3C	FMCC-H93C-L252
400 (438)	520	220	14.1	25	12 kg	3C	FMCC-H93C-M052
600 (657)	520	315	14.1	43	14 kg	3D	FMCC-H93D-U052
800 (876)	520	400	14.1	56	26 kg	3E	FMCC-H93E-Q052
1000 (1095)	520	560	14.1	88	26 kg	3E	FMCC-H93E-S052

Rated Current @ Ta 50°C (40°C) [A]	Rated Voltage [VAC]	Power (kW)	Leakage Cur- rent [mA] @ 440V, 60Hz 1)	Power Dissipation [W]	Weight [kg]	Housing	Order Number
1600 (1600)	520	900	14.1	150	29 kg	3F	FMCC-H93F-S652
2500 (2500)	520	1320	14.1	286	67 kg	3G	FMCC-H93G-T552
150 (164)	760	110	13.5	8	9 kg	3A	FMCC-193A-J534
180 (197)	760	132	13.5	11	9 kg	3A	FMCC-193A-J834
250 (250)	760	200	13.5	13	11 kg	3B	FMCC-I93B-K534
320 (350)	760	250	13.5	16	12 kg	3C	FMCC-193C-L254
400 (438)	760	315	13.5	25	12 kg	3C	FMCC-193C-M054
600 (657)	760	500	13.5	43	14 kg	3D	FMCC-I93D-U054
800 (876)	760	630	13.5	56	26 kg	3E	FMCC-193E-Q054
1000 (1095)	760	710	13.5	88	26 kg	3E	FMCC-I93E-S054
1600 (1600)	760	1320	13.5	150	29 kg	3F	FMCC-I93F-S654
2500 (2500)	760	2000	13.5	286	67 kg	3G	FMCC-I93G-T554

A vailability for all products can be searched real-time: https://www.schurter.com/en/info-center/support-tools/stock-check-distributors

1) Leakage current according IEC 60939-1

kaging	

1 Pcs

product selected for their own applications.